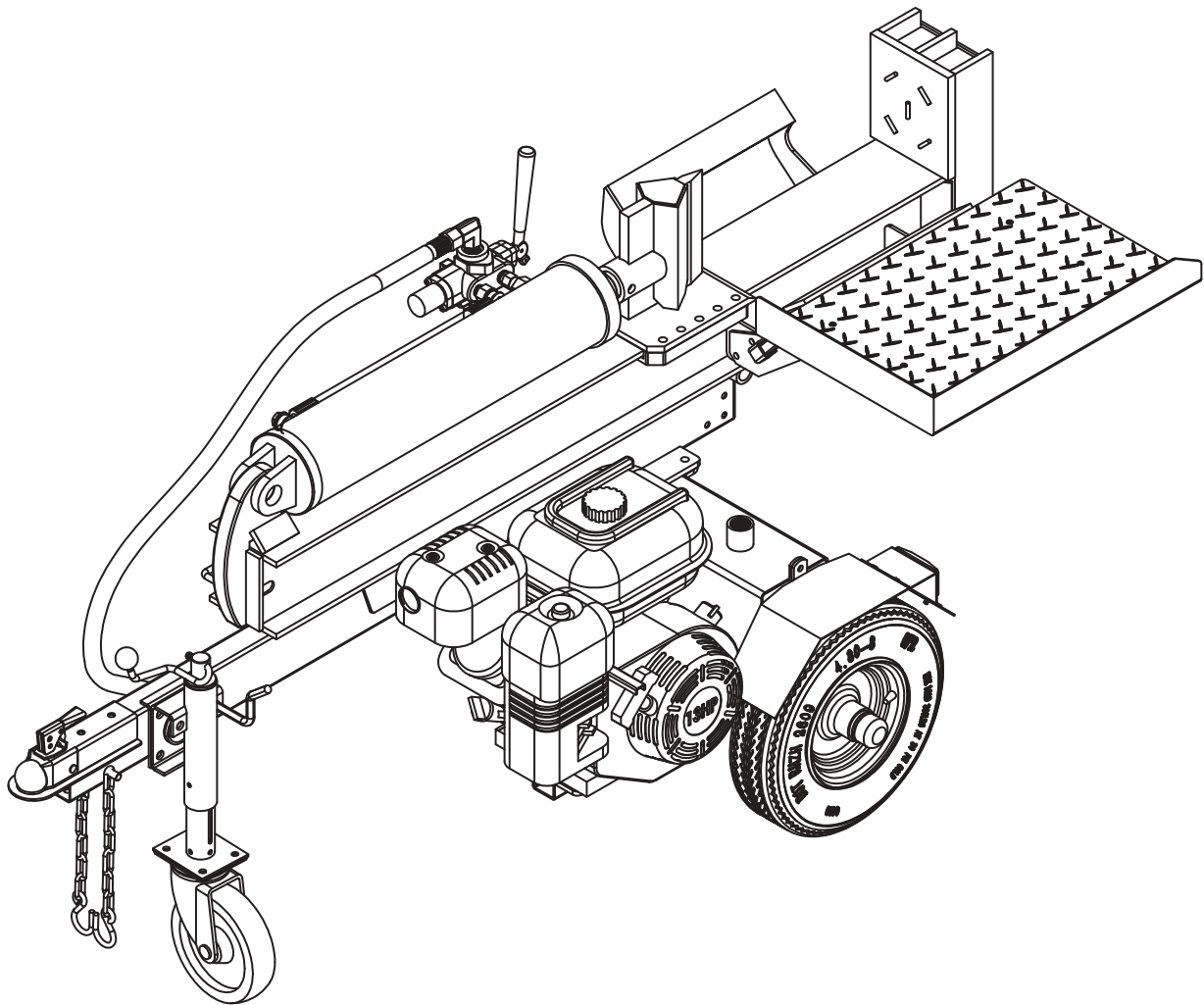


40TON LOG SPLITTER



OPERATOR'S MANUAL

IMPORTANT

READ SAFETY RULES AND INSTRUCTIONS CAREFULLY BEFORE OPERATION

Warning:

This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land.

Read this manual. Serious injury or death can result if safety instructions are not followed.

Save this manual all time.

This Operator’s Manual is an important part of your new log splitter. It will help you assemble, prepare and maintain the unit for best performance. Please read and understand what it says.

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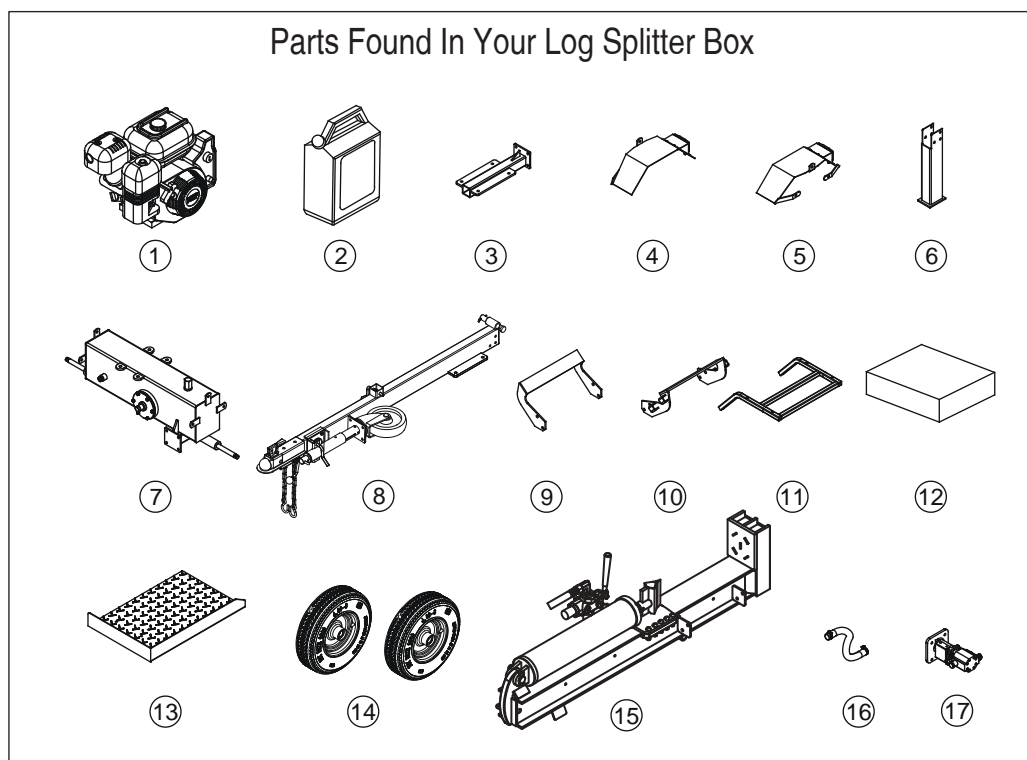
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Parts Found In Your Log Splitter Box



1 Engine	1set	10 Log Cradle - Right	1pc
2 16L Hydraulic Oil Drum	1pc	11 Wood Plate Mounting Frame	1pc
3 Engine Mounting Plate	1pc	12 Hardware Box	1pc
4 Fender-Right	1pc	13 Wood Plate	1pc
5 Fender-Left	1pc	14 D.O.T Pneumatic Wheels	2pcs
6 Support Leg	1pc	15 H-Beam & Cylinder SYSTEM	1set
7 Hydraulic Oil Tank Assembly	1set	16 Oil Pipe	1pc
8 Towing Bar Assembly	1set	17 Gear Pump Assembly	1pc
9 Log Cradle -Left	1pc		

Parts Found In Your Hardware Box

#41 Hex Bolt M10x30 18 pcs	#39 Hex Bolt M8x35 4 pcs	#54 Hex Bolt M12x40 4 pcs	#45 Hex Bolt M10x75 5 pcs	#85 Big Flat Washer Ø10 4 pcs	#47 R Pin 1 pc
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#55 Nylon Lock Nut M12 4 pcs	#5 Nylon Lock Nut M8 4 pcs	#43 Nylon Lock Nut M10 23 pcs	#33 Flat Washer Ø12 4 pcs	#4 Flat Washer Ø8 4 pcs	#42 Flat Washer Ø10 23 pcs
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#46 Hitch Pin 1 pc	#105 Rubber Washer 6pcs	#84 Polyurethane Block 4 pcs	#100 O Ring Ø14x2.5 1pc	#25 O Ring Ø17x2.5 1pc
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1

Parts Included



**CHECK Your product
Parts one by one
before assemble, and
ensure no parts mis-
sing, no damage.**

2

Safe Operation Practices



WARNING

This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in personal injury. When you see this symbol -

HEED ITS WARNING

Your Responsibility

Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual.



WARNING: Engine Exhaust, some of its constituents, and certain vehicle components contain or emit chemicals cause cancer and birth defects or other reproductive harm.

DANGER: This machine was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. This machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

General Practices

1. Read, understand, and follow all instructions on the machine and in the manual(s) before attempting to assemble and operate. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. Be familiar with all controls and proper operation. Know how to stop the machine and disengage them quickly.
3. Never allow children under 16 years to operate this machine. Children, 16 years and over, should read and understand instructions and safety rules in this manual and should be trained and supervised by a parent.
4. Never allow adults to operate this machine without proper instruction.
5. Many accidents occur when more than one person operates the machine. If a helper is assisting in loading logs, never activate the control until the helper is a minimum of 10 feet from the machine.
6. Keep bystanders, helpers, pets, and children at least 20 feet from the machine while it is in operation.
7. Never allow anyone to ride on this machine.
8. Never transport cargo on this machine.
9. Hydraulic log splitters develop high fluid pressures during operation. Fluid escaping through a pin hole opening can penetrate your skin and cause blood poisoning, gangrene, or death. Give attention to the following instructions at all times:
 - a. Do not check for leaks with your hand.
 - b. Do not operate machine with frayed, kinked, cracked, or damaged hoses, fitting, or tubing.
 - c. Stop the engine and relieve hydraulic system pressure before changing or adjusting fittings, hoses, tubing, or other system components.
 - d. Do not adjust the pressure settings of the pump or valve.
10. Leaks can be detected by passing cardboard or wood, while wearing protective gloves and safety glasses, over the suspected area. Look for discoloration of cardboard or wood.
11. If injured by escaping fluid, see a doctor immediately. Serious infection or reaction can develop if proper medical treatment is not administered immediately.
12. Keep the operator zone and adjacent area clear for safe, secure footing.
13. If your machine is equipped with an internal combustion engine and it is intended for use near any unimproved forest, brush, or grass covered land, the engine exhaust should be equipped with a spark arrester. Make sure you comply with applicable local, state, and federal codes. Take appropriate firefighting equipment with you.
14. This machine should be used for splitting wood only, do not use it for any other purpose.
15. Follow the instructions in the manual(s) provided with any attachment(s) for this machine.

Preparation

1. Always wear safety shoes or heavy boots.
2. Always wear safety glasses or safety goggles during operating this machine.
3. Never wear jewelry or loose clothing that might become entangled in moving or rotating parts of the machine.
4. Make sure machine is on level surface before operating.
5. Always block machine to prevent unintended movement, and lock in either horizontal or vertical position.
6. Always operate this machine from the operator zone(s) specified in the manual. (Fig. 4-6)
7. Logs should be cut with square ends prior to splitting.
8. Use log splitter in daylight or under good artificial light.
9. To avoid personal injury or property damage use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive. Serious personal injury can occur when gasoline is spilled on yourself or your clothes which can ignite. Wash your skin and change immediately.
 - a. Use only an approved gasoline container.
 - b. Extinguish all cigarettes, cigars, pipes, and other sources of ignition.
 - c. Never fuel machine indoors.
 - d. Never remove gas cap or add fuel while the engine is hot or running.
 - e. Allow engine to cool at least two minutes before refueling.

- f. Never overfill the fuel tank. Fill tank to no more than 1/2 inch below bottom of filler neck to provide space for fuel expansion.
- g. Replace gasoline cap and tighten securely.
- h. If gasoline is spilled, wipe it off the engine and equipment. move machine to another area. Wait 5 minutes before starting the engine.
- i. Never store the machine or fuel container inside where there is an open flame, spark or pilot light as on a water heater, space heater, furnace, clothes dryer or other gas appliances.
- j. Allow machine to cool 5 minutes before storing.

Operation

1. Before starting this machine, review the "Safety Instructions". Failure to follow these rules may result in serious injury to the operator or bystanders.
2. Never leave this machine unattended with the engine running.
3. Do not operate machine while under the influence of alcohol, drugs, or medication.
4. Never allow anyone to operate this machine without proper instruction.
5. Always operate this machine with all safety equipment in place and working. Make sure all controls are properly adjusted for safe operation.
6. Do not change the engine governor settings or overspeed the engine. The governor controls the maximum safe operating speed of the engine.
7. When loading a log, always place your hands on the sides of the log, not on the ends, and never use your foot to help stabilize a log. Failure to do so, may result in crushed or amputated fingers, toes, hand, or foot.
8. Use only your hand to operate the controls.
9. Never attempt to split more than one log at a time unless the ram has fully extended and a second log is needed to complete the separation of the first log.
10. For logs which are not cut square, the least square end and the longest portion of the log should be placed toward the beam and wedge, and the square end placed toward the end plate.
11. When splitting in the vertical position, stabilize the log before moving the control. Split as follows:
 - a. Place log on the end plate and turn until it leans against the beam and is stable.
 - b. When splitting extra large or uneven logs, the log must be stabilized with wooden shims or split wood between the log and end plate or ground.
12. Always keep fingers away from any cracks that open in the log while splitting. They can quickly close and pinch or amputate your fingers.
13. Keep your work area clean. Immediately remove split wood around the machine so you do not stumble over it.
14. Never move this machine while the engine is running.

15. This machine should not be towed on any street, highway or public road without checking the existing state, or local vehicle requirements. Any licensing or modifications such as taillights, etc., needed to comply, is the sole responsibility of the purchaser. If a "Statement of Origin" is required in your state, see your local dealer.

16. Do not tow machine faster than 30 mph.

17. See Transporting the Log Splitter section in this manual for proper towing instructions once all federal, local, or state requirements are met.

Maintenance and Storage

1. Stop the engine, disconnect the spark plug and ground it against the engine before cleaning, or inspecting the machine.
2. Stop the engine and relieve hydraulic system pressure before repairing or adjusting fittings, hoses, tubing, or other system components.
3. To prevent fires, clean debris and chaff from the engine and muffler areas. If the engine is equipped with a spark arrester muffler, clean and inspect it regularly according to manufacturers instructions. Replace if damaged.
4. Periodically check that all nuts and bolts, hose clamps, and hydraulic fittings are tight to be sure equipment is in safe working condition.
5. Check all safety guards and shields to be sure they are in the proper position. Never operate with safety guards, shields, or other protective features removed.
6. The pressure relief valve is preset at the factory. Do not adjust the valve.
7. Never attempt to move this machine over hilly or uneven terrain without a tow vehicle or adequate help.
8. For your safety, replace all damaged or worn parts immediately with original equipment manufacturer's (O.E.M.) parts only. "Use of parts which do not meet the original equipment specifications may lead to improper performance and compromise safety!"
9. Do not alter this machine in any manner, alterations such as attaching a rope or extension to the control handle, or adding to the width or height of the wedge may result in personal injury.

Your Responsibility

Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine. Always follow directions on safety labels found on your equipment.

2

Safe Operation Practices



WARNING

This symbol points out important safety instructions which, if not followed, could endanger the personal safety and/or property of yourself and others. Read and follow all instructions in this manual before attempting to operate this machine. Failure to comply with these instructions may result in personal injury. When you see this symbol - **HEED ITS WARNING**

Your Responsibility

Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual.

3

Setting Up Your Log Splitter



WARNING

Use extreme caution unpacking this machine. Some components are very heavy and will require additional people or mechanical handling equipment.



NOTE: All references in this manual to the left or right side of the log splitter is from the operating position only. Exceptions, if any, will be specified.

Step 1: Attached Tow Bar to the Oil Tank

Fix the tow bar(#65) to the oil tank(#51) by using 4 sets of hex bolt M12x40 (#54), flat washer Ø12 (#33) and nylon lock nut M12 (#55).

Attach suction hose (#104) to the oil tank, and secure by hose clamp (#103).

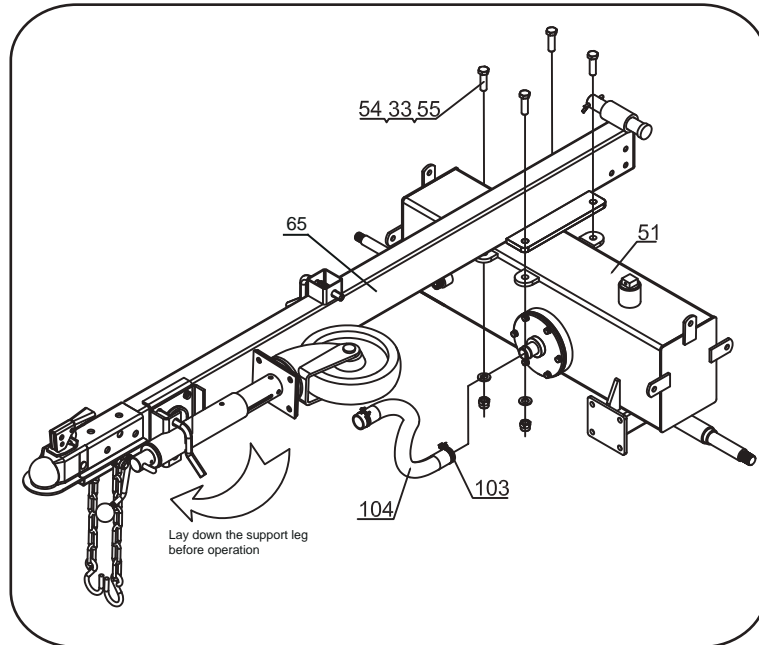


Figure 3-1

Step 2: Wheel Assembly

Fix the wheel (#77) to the oil tank (#51) axle by a flat washer Ø20 (#58), slotted nut M20 (#74), cotter pin Ø4x46 (#7) and attach the axle cap (#75).

Use a black plastic bushing to fix the axle cap (#75) like below picture. Please cover the black bushing onto the axle cap, and use rubber/wooden hammer knocking the end of the plastic bushing and make the axle cap fixed on wheel.

Axle Cap Plastic Bushing

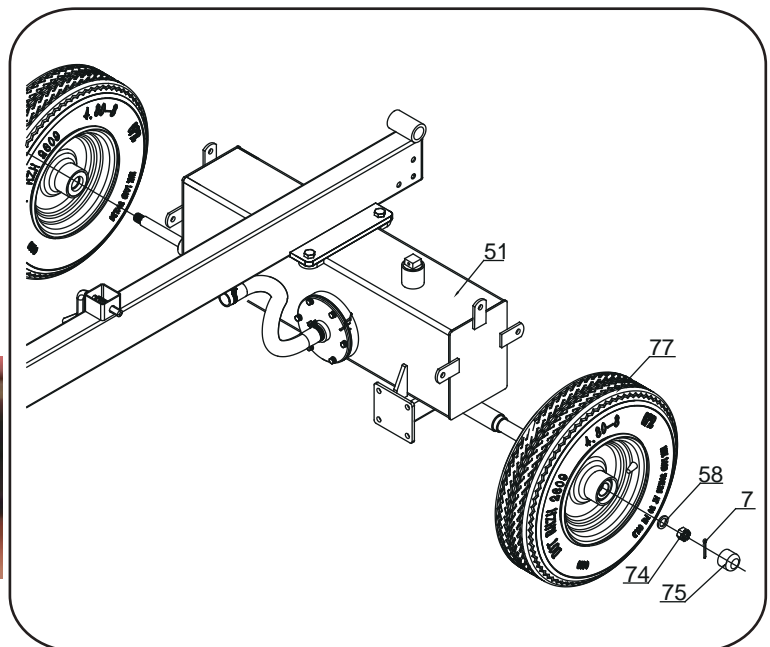


Figure 3-2

Step 3: Assembly Rear Support Leg

Fix the rear support leg (#44) to the tow bar (#65) by using hex bolt M10x75 (#45), lock nut M10 (#43), flat WasherØ10 (#8), flat washer Ø10(#42).

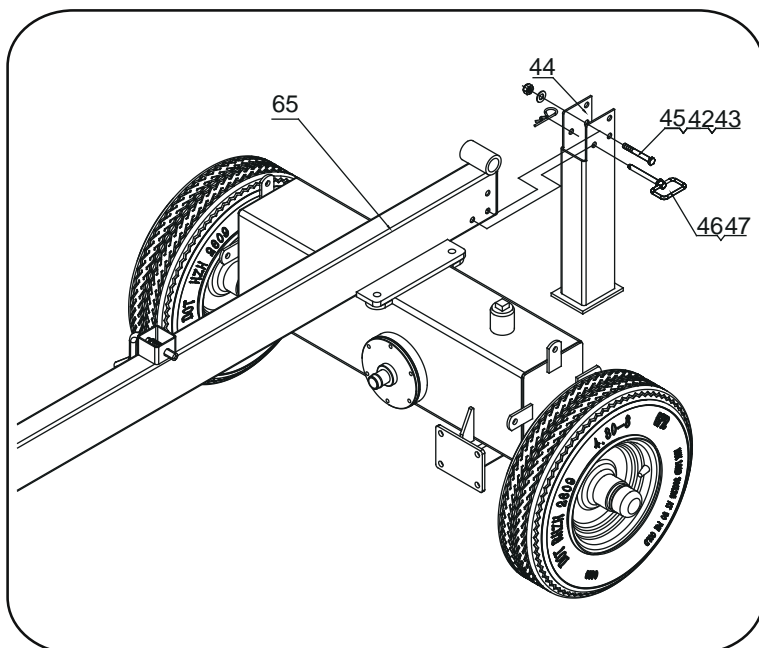


Figure 3-3

Step 4: Fenders Assembly

Assemble the right fender (#53) to right side to the oil tank, and left fender (#56) to another side, and fixed by hex bolt M10x30 (#41), flat wash Ø10 (#42), lock nut M10 (#43).

Note: Put a rubber washer (#105) between fenders and oil tank.

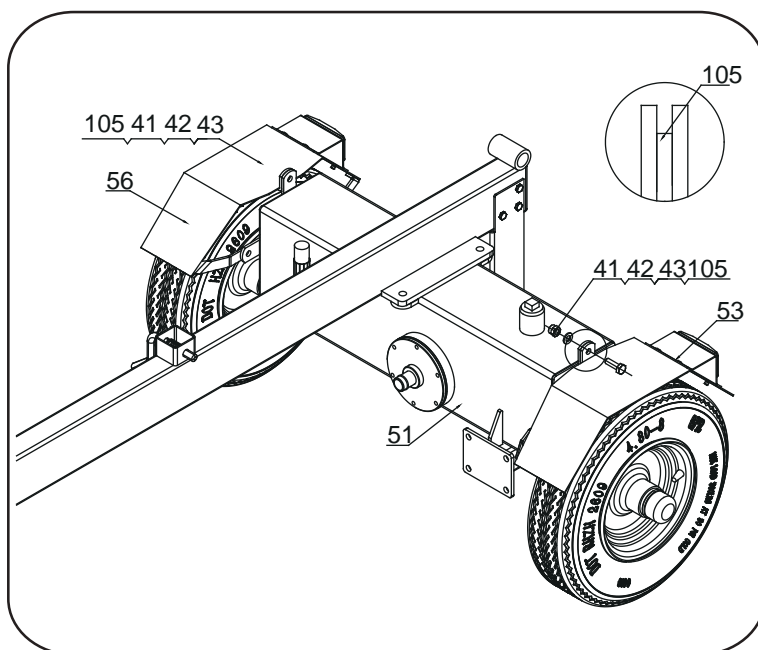


Figure 3-4

3

Setting Up Your Log Splitter



WARNING

Much of the original fluid has been drawn into the cylinder and hoses. Make certain to refill the reservoir to prevent damage to the hydraulic pump.

3

Setting Up Your Log Splitter



WARNING

Use extreme caution unpacking this machine. Some components are very heavy and will require additional people or mechanical handling equipment.



NOTE: All references in this manual to the left or right side of the log splitter is from the operating position only. Exceptions, if any, will be specified.

Step 5 : Assembly Engine Mounting Plate

Assemble the engine mounting plate (#68) to oil tank (#51), fixed by using bex bolt M10x30 (#41), flat washer Ø10 (#42) and lock nut M10 (#43).

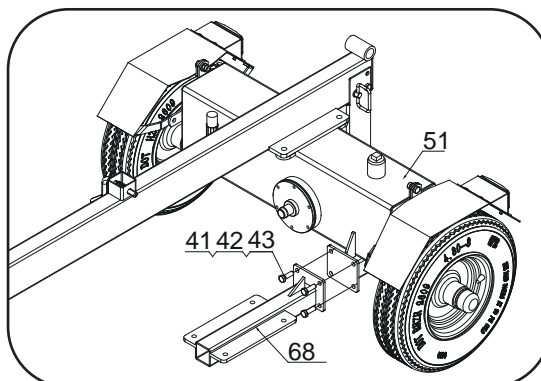


Figure 3-5

Step 6 : Mounting H Beam to Tow Bar

Remove the hinge pin (#48) and cotter pin Ø4x40 (#49) from tow bar.

Attach beam to the tow bar secure with hinge pin (#48) and cotter pin Ø4x40 (#49).

Attach hydraulic hose (valve - oil tank) (#101) to the return oil pipe connector of oil tank put a o ring 17x2.5 (#25) in the middle of them.

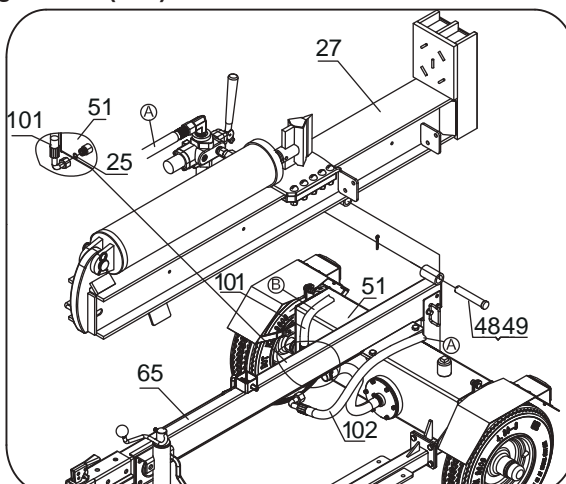


Figure 3-6

Step 7: Assembly Gear Pump

Take down the flat key (#97) from the engine shaft, put the engine bushing (#95) to the engine shaft, insert the flat key (#97) to the engine shaft again, then assemble the engine connector (#94) to the engine shaft.

Assemble the gear pump assembly to the engine by using hex bolt M8x25 (#86), lock washer Ø8 (#87) and flat washer Ø8 (#4).

Assemble the connector cover (#99) to the gear pump stand by using hex bolt M5x10(#98).

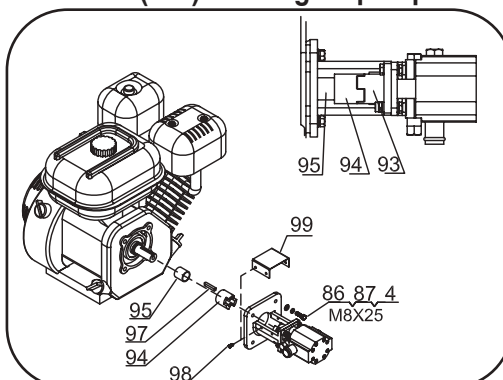


Figure 3-7

Step 8: Assembly Engine Components

Assemble the engine component (#83) to mounting plate (#68), put polyurethane block (#84) and big flat washer Ø10 (#85) in between engine and mounting plate. Fixed by hex bolt M10x75 (#45), flat washer Ø10 (#42), nylon lock nut M10 (#43).

Assemble the suction hose (#104) into the connector of gear pump (B1), secure by hose clamp (#103).

Assemble the hydraulic hose (valve-pump) (#102) into the connector of gear pump (C1), by o ring 14x2.5 (#100), then tighten.

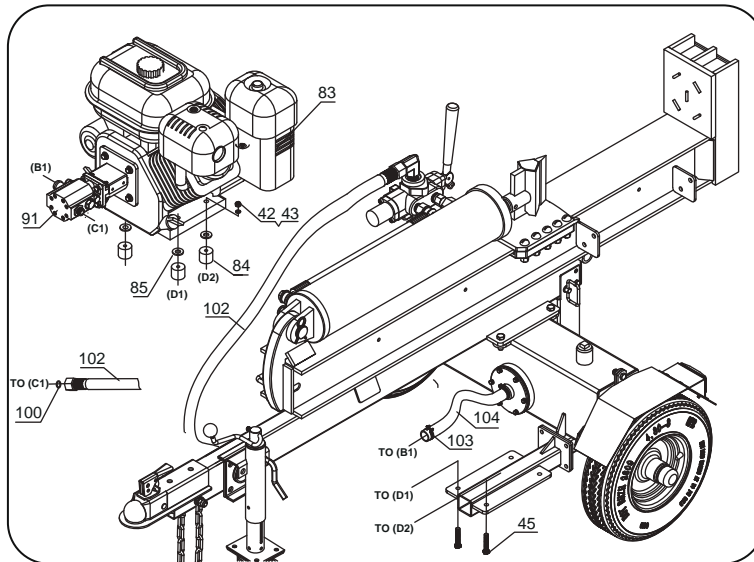


Figure 3-8

Step 9 : Log Cradle and Wood Tray Assembly

Assemble the left log cradle (#28) to mounting plate of H beam left side, and assemble the right log cradle (#40) to mounting plate of H beam right side. Fixed by hex bolt M10 x30 (#41), flat washer Ø10 (#42), nylon lock nut M10 (#43).

Assemble the wood tray (#37) to tray frame (#38), fixed by hex bolt M8x35 (#39), flat washer Ø8 (#4), nylon lock nut M8 (#5).

Attach the wood tray assembly to the right log cradle (#40).

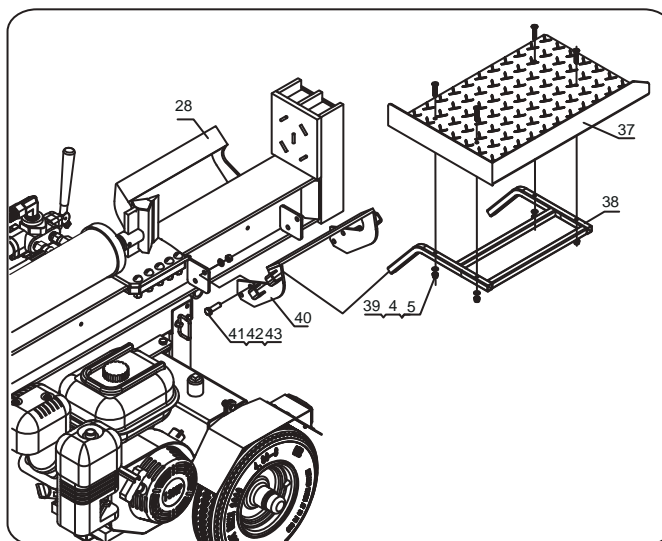


Figure 3-9

3

Setting Up Your Log Splitter



WARNING

Much of the original fluid has been drawn into the cylinder and hoses. Make certain to refill the reservoir to prevent damage to the hydraulic pump.



IMPORTANT:

The log splitter may have been shipped and primed with hydraulic fluid in the reservoir tank. If not, proceed with the following steps:

NOTE: Some fluid may overflow from the vent plug as the system builds heat and the fluid expands and seeks a balanced level.

4

Operating Your Log Splitter



WARNING



IMPORTANT

Your log splitter is shipped without motor oil in the engine.

You **MUST** add the oil before operating.

Be careful not to overfill.

Know Your Log Splitter

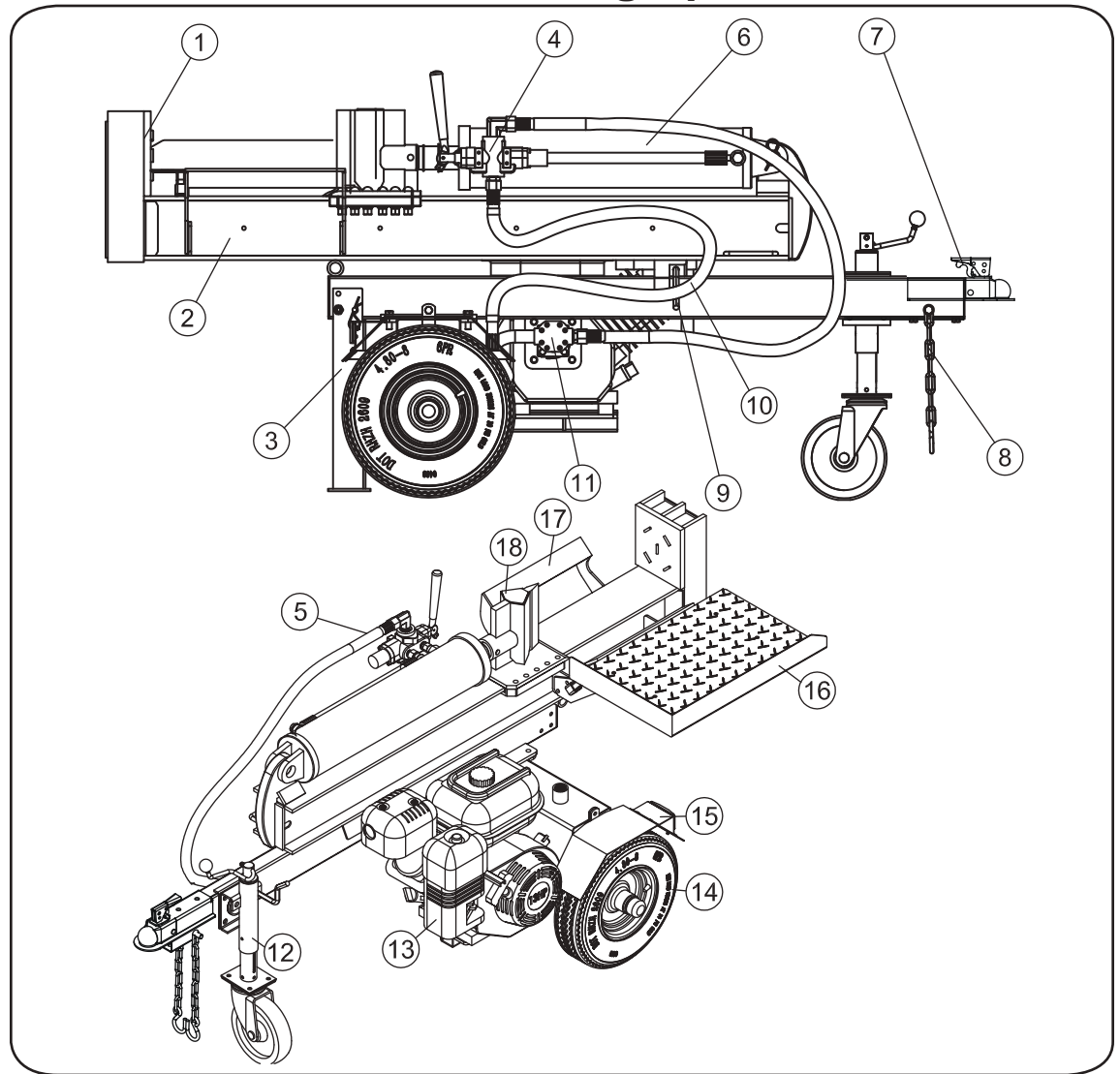


Figure 4-1

1. 106 mm thickness End Plate
2. Beam. The beam is made of 6" wide flange beam
3. Rear Support Leg : The leg supports the log splitter steadily while operating.
4. Control Valve. Use the control valve handle to move the wedge slide forward and backward.
5. Hydraulic Oil Inlet Hose
6. Cylinder: The hydraulic cylinder has a 5" bore and a 19.4" stroke.
7. 2" Coupler. Attaches the log splitter to your vehicle. Fits only 2" hitch balls.
8. Safety Chains. A safety feature to prevent loss of log splitter while towing.
9. Beam Lock Pin
10. Hydraulic Oil Outlet Hose .
11. Gear Pump : 2-Stage , Max. 16 GPM .
12. Jockey Wheel
13. Engine :13HP , 4-stroke , Gas engine manual start.
14. D.O.T Pneumatic Tire: Maximum rated speed is 45 MPH.
15. Fenders With Reflector Lamp
16. Large Wood Tray
17. Log Cradle :Keeps the log on the beam without operator assistance.
18. Cast Steel Wedge Component.

Control Handle

The control handle has three positions. See Figure 4-2.

- **FORWARD:** Move control handle FORWARD or DOWN to move wedge to split wood.

NOTE: Control handle will return to neutral position as soon as handle is released. (**Forward Position only**)

- **NEUTRAL:** Release the control handle or move the lever to neutral position to stop the wedge movement.
- **REVERSE:** Move control handle BACK or UP to return the wedge toward the cylinder. The control handle stays in the return (Reverse) position and returns to neutral automatically when fully retracted.

NOTE: Reverse position may also be operated back to neutral position manually, if necessary.

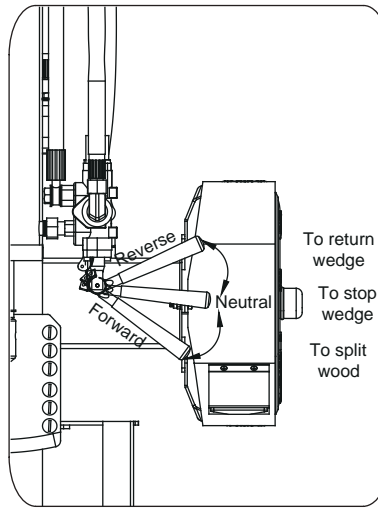


Figure 4-2

Stopping Engine

1. Move throttle control handle to STOP or OFF position.
2. Turn off the engine switch.
3. Disconnect spark plug wire and ground against the engine to prevent unintended starting.

IMPORTANT: Your log splitter may be shipped without motor oil in the engine. You **MUST** check and add the oil before operating. Be careful not to overfill.



WARNING: Read, understand, and follow all instructions and warnings on the machine and in this manual before operating.



WARNING: Wear leather work gloves, safety shoes, ear protection, and safety glasses when operating a log splitter. Ensure safe footing.

Gas and Oil Fill-Up

1. Service the engine with gasoline and oil as instructed in the engine manual packed with your log splitter. Read instructions carefully.



WARNING: Use extreme care when handling gasoline. Gasoline is extremely flammable and the vapors are explosive. Never fuel machine indoors or while the engine is hot or running.



WARNING: When starting a warm engine, the muffler and surrounding areas are hot and can cause a burn. Do not touch.

IMPORTANT: Your log splitter is shipped with motor oil in the engine. However, you **MUST** check the oil level before operating. Be careful not to overfill.

NOTE: Gasoline can be added to the engine when the log splitter is in either the horizontal or vertical position. However, there are less obstructions when the unit is in the vertical position.

Starting Engine

1. Attach spark plug wire to spark plug. Make certain the metal cap on the end of the spark plug wire is fastened securely over metal tip of the spark plug.
2. Turn fuel valve, if equipped, to the ON position.
3. Move choke lever, if equipped, to CHOKE position.
4. If the engine is equipped with a primer, follow instructions in the engine manual to prime it.
5. Turn the throttle control handle to the FAST position.
6. Grasp starter handle and pull rope out slowly until engine reaches start of compression cycle (rope will pull slightly harder at this point).
7. Pull rope with a rapid, full arm stroke. Keep firm grip on starter handle. Let rope rewind slowly. Repeat until engine cranks.
8. After engine starts, move choke lever (if equipped) to OFF position. Place throttle lever to the speed desired.
9. In cold weather, run wedge up or down beam 6 to 8 times to circulate the hydraulic fluid.

4

Operating Your Log Splitter



WARNING

Read, understand, and follow all instructions and warnings on the machine and in this manual before operating.

Wear leather work gloves, safety shoes, ear protection, and safety glasses when operating a log splitter. Ensure safe footing.

Use extreme care when handling gasoline. Gasoline is extremely flammable and the vapors are explosive. Never fuel machine indoors or while the engine is hot or running.

When starting a warm engine, the muffler and surrounding areas are hot and can cause a burn. Do not touch.

4

Operating Your Log Splitter



WARNING

Never remove partially split wood from the wedge with your hands. Fingers may become trapped between split wood.

Always keep the rear support leg down, and secure by lock pin at any working position.

Do not tow faster than 45mph and check local, state requirements before towing on any public road.

FOR HORIZONTAL USING

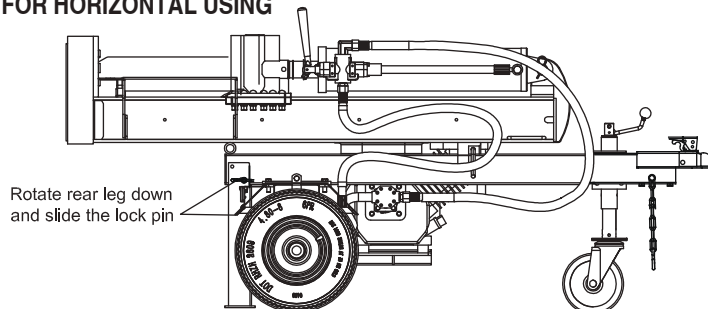


Figure 4-3

Horizontal Position

1. Rotate the vertical beam down. See Figure 4-3.
Pivot beam to the horizontal position. The beam will lock automatically in horizontal position.
2. Stand behind the reservoir tank to operate control handle and to stabilize the log.

FOR VERTICAL USING

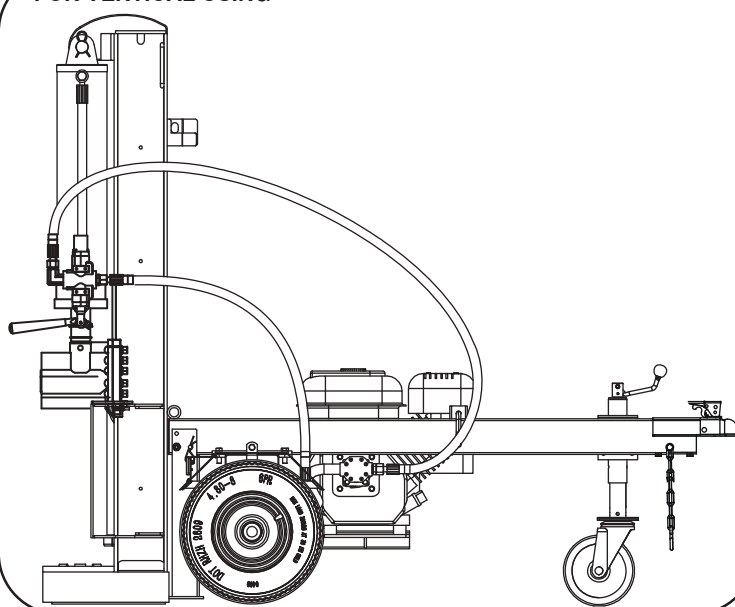


Figure 4-4

Vertical Position

1. Pull the horizontal beam lock out to release the beam and pivot the beam to the vertical position.
2. Stand in front of the unit to operate the control handle and to stabilize the log.
See Figure 4-4.

Transporting

IMPORTANT: Always turn fuel valve to OFF position before transporting the log splitter.

1. Lower the beam to its horizontal position. Make certain the beam is locked securely with the horizontal beam lock pin.
2. Rotate up the Rear Support Leg, secure by Lock Pin.
3. Swing Jockey Wheel up, See Figure 4-5.
4. Attach coupler hitch to a class I or higher ball on a towing vehicle; latch securely.
 - a. If coupler hitch does not fit on ball: Turn adjustment nut one turn counter-clockwise.
 - b. If coupler hitch is too loose on ball: Turn adjustment nut one turn clockwise.
5. Connect the safety chains to the towing vehicle.

FOR VEHICLE TOWING

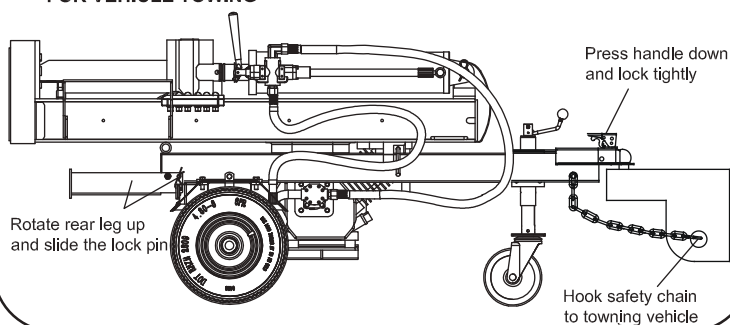


Figure 4-5

HORIZONTAL OPERATING POSITION

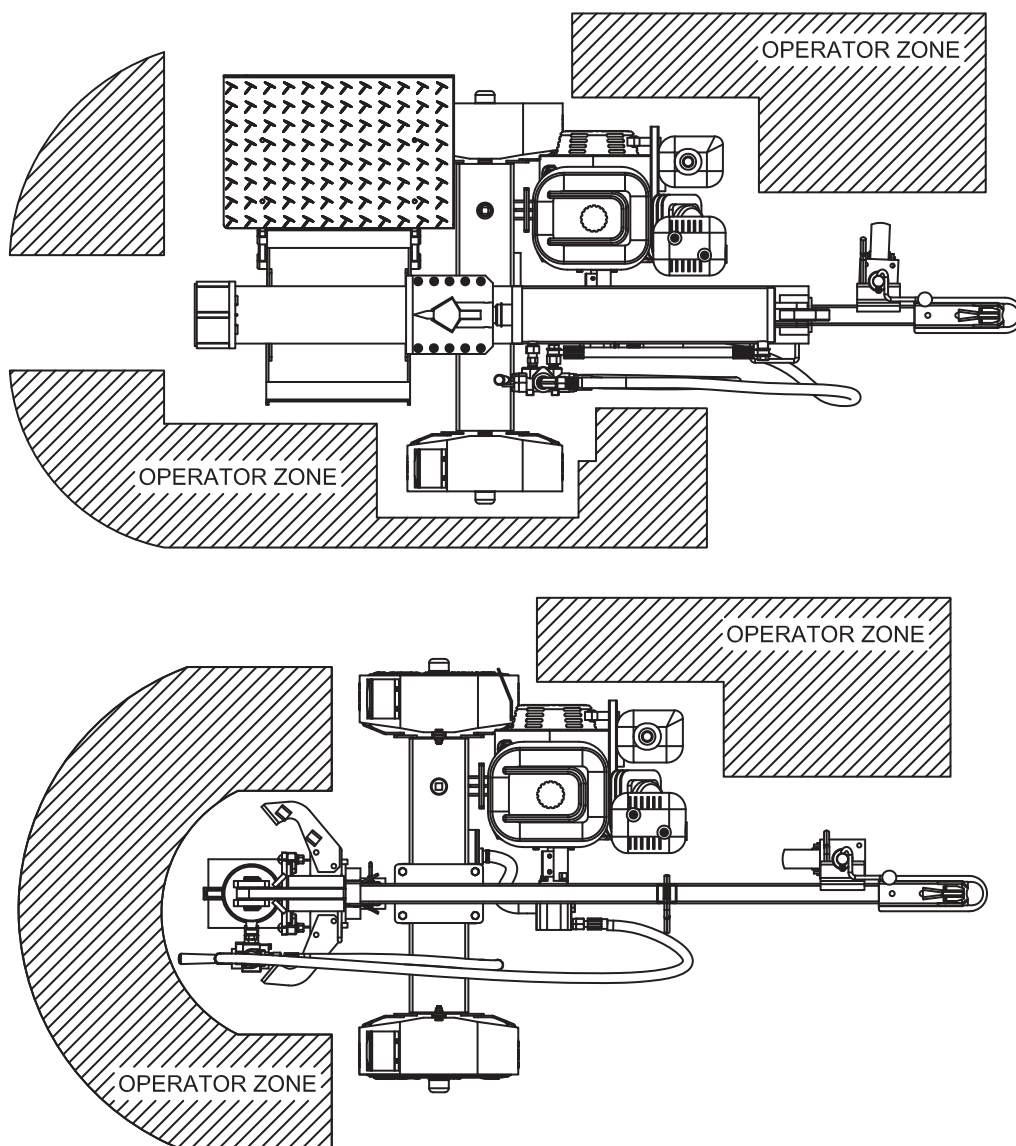


Figure 4-6

4

Operating Your Log Splitter



WARNING

Always use the log splitter in the vertical position when splitting heavy logs.

4

Operating Your Log Splitter



WARNING

Never remove partially split wood from the wedge with your hands. Fingers may become trapped between split wood.

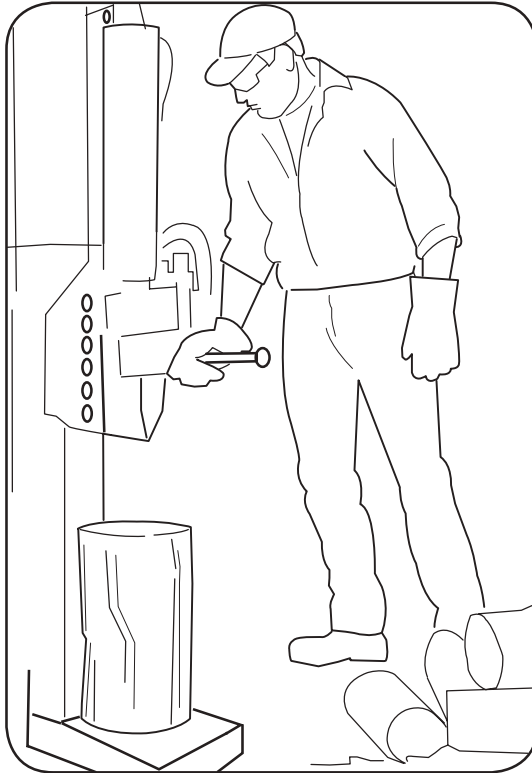


Figure 4-3

Before Each Use

1. Remove the dipstick and check hydraulic fluid level.
2. Check engine oil level. Refill if necessary.
3. Fill up gasoline if necessary.
4. Lubricate the beam area where splitting wedge will slide with engine oil. Do not use grease to lubricate. Make sure to lubricate both the front and the back of the beam face.
5. Attach spark plug wire to the spark plug.

Using the Log Splitter

1. Place the log splitter on level, dry ground.
2. Place the beam in either the horizontal or vertical position and lock in place with the appropriate locking rod.
3. Block the front and back of both wheels.
4. Place the log against the end plate and only split wood in the direction of the grain.
5. To stabilize the log, place your hand only on sides of log. **Never place hand on the end between the log and the splitting wedge.**
6. Only one adult should stabilize the log and operate the control handle, so the operator has full control over the log and the splitting wedge.

Control Handle

1. Move control handle FORWARD or DOWN to split wood.

2. Release the control handle to stop the wedge movement.
3. Move control handle BACK or UP to return the wedge.

Log Dislodger

The log dislodger is designed to remove any partially split wood from the wedge. This may occur while splitting large diameter wood or freshly cut wood.



WARNING: Never remove partially split wood from the wedge with your hands. Fingers may become trapped between split wood.

1. To remove partially split wood from wedge, move control handle to REVERSE position until wedge is fully retracted to allow split wood portion to contact the log dislodger.
2. Once removed from wedge with log dislodger, split wood from opposite end or in another location.

Operating Tips

Always:

1. Use clean fluid and check fluid level regularly.
2. Use an approved hydraulic fluid.
Such as : 10W AW-32, ASLE H-150, ISO 32
3. Use a filter (clean or replace regularly).
4. Use a breather cap on fluid reservoir.
5. Make sure pump is mounted and aligned properly.
6. Use a flexible "spider" type coupling between engine and pump drive shafts.
7. Keep hoses clear and unblocked, untouch any metal part.
8. Bleed air out of hoses before operating.
9. Flush and clean hydraulic system before restarting after servicing.
10. Use "pipe dope" on all hydraulic fittings.
11. Allow time for warm-up before splitting wood.
12. Prime the pump before initial start-up by turning over the engine with spark plug disconnected (if not already done at factory).
13. Split wood along the grain (lengthwise) only.

Never:

1. Use when fluid is below 20° F or above 150° F.
2. Use a solid engine /pump coupling.
3. Operate through relief valve for long.
4. Attempt to adjust unloading or relief valve settings without pressure gauges.
5. Operate with air in hydraulic system.
6. Use teflon tape on hydraulic fittings.
7. Attempt to cut wood across the grain.
8. Attempt to remove partially split wood from the wedge with your hands. Fully retract wedge to dislodge wood with log dislodger.

6. Use a flexible "spider" type coupling between engine and pump drive shafts.
7. Keep hoses clear and unblocked, untouch any metal part.
8. Bleed air out of hoses before operating.
9. Flush and clean hydraulic system before restarting after servicing.
10. Use "pipe dope" on all hydraulic fittings.
11. Allow time for warm-up before splitting wood.
12. Prime the pump before initial start-up by turning over the engine with spark plug disconnected (if not already done at factory).
13. Split wood along the grain (lengthwise) only.

Never:

1. Use when fluid is below 20° F or above 150° F.
2. Use a solid engine /pump coupling.
3. Operate through relief valve for long.
4. Attempt to adjust unloading or relief valve settings without pressure gauges.
5. Operate with air in hydraulic system.
6. Use teflon tape on hydraulic fittings.
7. Attempt to cut wood across the grain.
8. Attempt to remove partially split wood from the wedge with your hands. Fully retract wedge to dislodge wood with log dislodger.

Raising and Lowering Beam

1. Use control handle to run wedge up and down beam 6 to 8 times to circulate the hydraulic fluid, which will warm and thin the fluid.

2. Place log splitter on a firm, level surface.

To raise the beam for vertical operation:

3. Pull out the horizontal beam lock pin on two bar.
4. Release the beam.
5. Move the beam to the vertical position.



WARNING: Always use the log splitter in the vertical position when splitting heavy logs.

To lower the beam:

1. Pull out the vertical beam lock on the reservoir tank.
2. Pivot beam lock down to release the beam.
3. Carefully pull back on beam and lower it to the horizontal position. The horizontal beam lock will lock automatically. See Figure 4-1.



WARNING: Always KEEP REAR SUPPORT LEG DOWN AND SECURE BY LOCK PIN AT VERTICAL OR HORIZONTAL USING .

Transporting the Log Splitter

IMPORTANT: Always turn fuel valve to OFF position before transporting the log splitter.

1. Lower the beam to its horizontal position. Make certain the beam is locked securely with the horizontal beam lock pin.
2. Rotate up the Rear Support Leg, secure by Lock Pin.
3. Swing Jockey Wheel up, See Figure 4-5.
4. Attach coupler hitch to a class I or higher ball on a towing vehicle; latch securely.
 - a. **If coupler hitch does not fit on ball:** Turn adjustment nut one turn counter-clockwise.
 - b. **If coupler hitch is too loose on ball:** Turn adjustment nut one turn clockwise.
5. Connect the safety chains to the towing vehicle.



WARNING: Do not tow faster than 45mph and check local, state requirements before towing on any public road.

NOTE: Use caution when backing up. It is recommended to use a spotter outside the vehicle.

4

Operating Your Log Splitter



WARNING

Always use the log splitter in the vertical position when splitting heavy logs.

Do not tow faster than 45mph and check local, state, and federal requirements before towing on any public road.

5

Maintaining Your Log Splitter



WARNING

Do not at any time make any adjustments without first stopping engine, disconnecting spark plug wire, and grounding it against the engine. Always wear safety glasses during operation or while performing any adjustments or repairs.

Before cleaning, lubricating, repairing, or inspecting, disengage the control lever and stop engine. Disconnect the spark plug wire and ground it against the engine to prevent unintended starting. Always wear safety glasses during operation or while performing any adjustments or repairs.

Higher pressure could cause the hoses to burst, cylinder to rupture, and intense fluid to be released, which could result in serious personal injury.



WARNING: Do not at any time make any adjustments without first stopping engine, disconnecting spark plug wire, and grounding it against the engine. Always wear safety glasses during operation or while performing any adjustments or repairs.



WARNING: Before cleaning, lubricating, repairing, or inspecting, disengage the control lever and stop engine. Disconnect the spark plug wire and ground it against the engine to prevent unintended starting. Always wear safety glasses during operation or while performing any adjustments or repairs.



WARNING: Higher pressure could cause the hoses to burst, cylinder to rupture, and intense fluid to be released, which could result in serious personal injury.

Conditions that Will Void Warranty

1. Failure to maintain proper fluid level in reservoir
2. Changing the relief valve setting or pressure adjustment of control valve without proper knowledge and instruction from the factory
3. Disassembling the pump
4. Use of incorrect hydraulic fluid
5. Allowing the flexible pump coupler to deteriorate without proper and regular inspection
6. Lack of lubrication or improper lubrication of the beam or unit
7. Improper adjustment of splitting wedge
8. Excessive heating of the hydraulic system
9. Attempting to start unit in temperatures under 20°F without pre-heating fluid in reservoir
10. Unattended leaks in hydraulic system

Storing Your Log Splitter

Prepare your log splitter for storage at the end of the season or if the log splitter will not be used for 30 days or more.



WARNING: Never store machine with fuel in the fuel tank inside of building where fumes may reach an open flame or spark, or where ignition sources are present such as hot water and space heaters, furnaces, clothes dryers, stoves, electric motors, etc.

1. Clean the log splitter thoroughly.

NOTE: We do not recommend the use of pressure washers or garden hose to clean your unit. They may cause damage to bearings or the engine. The use of water will result in shortened life and reduce serviceability.

2. Wipe unit with an oiled rag to prevent rust, especially on the wedge and the beam.
3. Drain fuel tank. Always drain fuel into approved container outdoors, away from open flame. Be sure that engine is cool before draining the fuel. Do not smoke while handling fuel.
4. Start the engine and let it run until the fuel lines and carburetor are empty.
5. Remove spark plug. Holding a rag over the cylinder hole, pour approximately 1/2 ounce (approximately one tablespoon) of engine oil into cylinder and crank slowly to distribute the oil.
6. Replace spark plug.
7. Do not store gasoline from one season to another.
8. Replace your gasoline can if it starts to rust. Rust and/or dirt in the gasoline will cause problems.
9. Store unit in a clean, dry area. Do not store next to corrosive materials, such as fertilizer.

NOTE: If storing in an unventilated or metal storage shed, be certain to rustproof the equipment by coating with a light oil or silicone.

Hydraulic Fluid and Inlet Filter

- Check the hydraulic fluid level in the log splitter reservoir tank before each use. Maintain fluid level within the range specified on the dipstick at all times.
- Change the hydraulic fluid in the reservoir every 100 hours of operation. Follow the steps below:
 1. Discharge hydraulic fluid by unthread drain plug, and Disconnect the suction hose from the bottom of the reservoir tank.
 2. Carefully unthread the inlet filter and clean it with penetrating oil. See Figure 5-2.
 3. Allow the fluid to drain into a suitable container.
 4. Reinsert the filter and refill the reservoir with three gallons of oil. Approved fluids include Dexron® III / Mercon® III automatic transmission fluid, a 10 Weight AW hydraulic oil or Pro-Mix™ AW-32 Hydraulic Oil.
- Maintain fluid level within the range specified on the dipstick at all times. When checking the fluid, always make sure to tighten the dipstick until the top of the threads are flush with the top of the pipe.

NOTE: Always dispose of used hydraulic fluid and engine oil at approved recycling centers only.

- Contaminants in fluid may damage the hydraulic components. Flushing the reservoir tank and hoses with kerosene whenever service is performed on the tank, hydraulic pump or valve is recommended. Contact an authorized service dealer.

Hydraulic Filter

- Change the hydraulic filter every 50 hours of operation.

Beam and Splitting Wedge

- Lubricate both sides of the beam (where it comes into contact with the splitting wedge), before each use, with engine oil. The wedge plate on the log splitter is designed so the gibs on the side of the wedge plate can be removed and rotated and/or turned over for even wear.

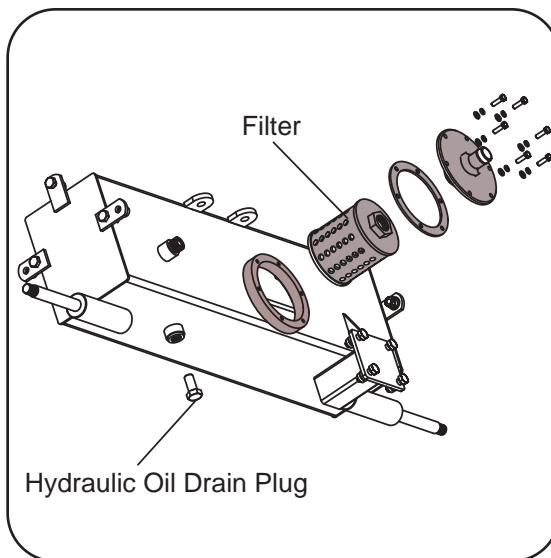


Figure 5-2

- Make certain to readjust the adjustment bolts so wedge moves freely, but no excess space exists between the wedge plate and the beam.

Hose Clamps

- Check, before each use, if hose clamps on the suction hose (attached to the side of the pump) are tight. Check the hose clamps on the return hose at least once a season.

Engine

Refer to the separate engine manual for all maintenance instructions.

Tires

See sidewall of tire for recommended pressure. Under any circumstances do not exceed manufacturer's recommended psi. Maintain equal pressure on all tires.



WARNING: Excessive pressure when seating beads may cause tire/rim assembly to burst with force sufficient to cause serious injury. Refer to sidewall of tire for recommended pressure.

5

Maintaining Your Log Splitter



WARNING



NOTE: Always dispose of used hydraulic fluid and engine oil at approved recycling centers only.

IMPORTANT

Never hit the engine shaft in any manner, as a blow will cause permanent damage to the engine.

5

Maintaining Your Log Splitter



WARNING

Never store machine with fuel in the fuel tank inside of building where fumes may reach an open flame or spark, or where ignition sources are present such as hot water and space heaters, furnaces, clothes dryers, stoves, electric motors, etc.



NOTE: We do not recommend the use of pressure washers or garden hose to clean your unit. They may cause damage to bearings or the engine. The use of water will result in shortened life and reduce serviceability.

Storing Your Log Splitter

Prepare your log splitter for storage at the end of the season or if the log splitter will not be used for 30 days or more.



WARNING: Never store machine with fuel in the fuel tank inside of building where fumes may reach an open flame or spark, or where ignition sources are present such as hot water and space heaters, furnaces, clothes dryers, stoves, electric motors, etc.

1. Clean the log splitter thoroughly.

NOTE: We do not recommend the use of pressure washers or garden hose to clean your unit. They may cause damage to bearings or the engine. The use of water will result in shortened life and reduce serviceability.

2. Wipe unit with an oiled rag to prevent rust, especially on the wedge and the beam.
3. Drain fuel tank. Always drain fuel into approved container outdoors, away from open flame. Be sure that engine is cool before draining the fuel. Do not smoke while handling fuel.
4. Start the engine and let it run until the fuel lines and carburetor are empty.
5. Remove spark plug. Holding a rag over the cylinder hole, pour approximately 1/2 ounce (approximately one tablespoon) of engine oil into cylinder and crank slowly to distribute the oil.
6. Replace spark plug.
7. Do not store gasoline from one season to another.
8. Replace your gasoline can if it starts to rust. Rust and/or dirt in the gasoline will cause problems.
9. Store unit in a clean, dry area. Do not store next to corrosive materials, such as fertilizer.

NOTE: If storing in an unventilated or metal storage shed, be certain to rustproof the equipment by coating with a light oil or silicone.

Problem	Cause	Remedy
Slow cylinder shaft speed while extending and retracting.	<ol style="list-style-type: none"> 1. Gear sections damaged. 2. Excessive pump inlet vacuum. 3. Slow engine speed. 4. Damaged relief valve. 5. Incorrect oil level. 6. Contaminated oil. 7. Directional valve leaking internally. 8. Internally damaged cylinder. 	<ol style="list-style-type: none"> 1. See authorized service dealer. 2. Make certain pump inlet hoses are clear and unblocked-use short, large diameter inlet hoses. 3. See authorized service dealer. 4. See authorized service dealer. 5. Check oil level. 6. Drain oil, clean reservoir, and refill. 7. See authorized service dealer. 8. See authorized service dealer.
Leaking Cylinder	<ol style="list-style-type: none"> 1. Broken seals. 2. Scored cylinder. 	<ol style="list-style-type: none"> 1. See authorized service dealer. 2. See authorized service dealer.
Engine runs but wood will not split or wood splits too slowly	<ol style="list-style-type: none"> 1. Small gear section damaged. 2. Pump check valve leaking. 3. Excessive pump inlet vacuum. 4. Incorrect oil level. 5. Contaminated oil. 6. Directional valve leaking internally. 7. Overloaded cylinder. 8. Internally damaged cylinder. 	<ol style="list-style-type: none"> 1. See authorized service dealer. 2. See authorized service dealer. 3. Make certain pump inlet hoses are clear and unblocked. 4. Check oil level. 5. Drain oil, clean reservoir, and refill. 6. See authorized service dealer. 7. Do not attempt to split wood against the grain. 8. See authorized service dealer.
Engine stalls during splitting	<ol style="list-style-type: none"> 1. Low horsepower/weak engine. 2. Overloaded cylinder. 	<ol style="list-style-type: none"> 1. See authorized service dealer. 2. Do not attempt to split wood against the grain or see authorized service dealer.
Engine will not turn or stalls under low load conditions	<ol style="list-style-type: none"> 1. Engine/pump misalignment. 2. Frozen or seized pump. 3. Low horsepower/weak engine. 4. Hydraulic lines blocked. 5. Blocked directional valve. 	<ol style="list-style-type: none"> 1. Correct alignment as necessary. 2. See authorized service dealer. 3. See authorized service dealer. 4. Flush and clean hydraulic system. 5. Flush and clean hydraulic system.
Leaking pump shaft seal	<ol style="list-style-type: none"> 1. Broken drive shaft. 2. Engine/pump misalignment. 3. Gear sections damaged. 4. Poorly positioned shaft seal. 5. Plugged oil breather. 	<ol style="list-style-type: none"> 1. See authorized service dealer. 2. Correct alignment as necessary. 3. See authorized service dealer. 4. See authorized service dealer. 5. Make certain reservoir is properly vented.

6

Hydraulic Trouble Shooting



For repairs beyond the minor adjustments listed here, contact an authorized service dealer.

6

Trouble Shooting



For repairs beyond the minor adjustments listed here, contact an authorized service dealer.

Hydraulic Trouble Shooting

Problem	Cause	Remedy
Engine fails to start	<ol style="list-style-type: none"> 1. Spark plug wire disconnected. 2. Fuel tank empty or stale fuel. 3. Choke, if equipped, not in CHOKE position. 4. Faulty spark plug. 5. Blocked fuel line. 6. Engine (if equipped with a primer) not primed properly. 7. Throttle control lever not in correct starting position. 	<ol style="list-style-type: none"> 1. Connect wire to spark plug. 2. Fill tank with clean, fresh gasoline. 3. Move choke to CHOKE position. 4. Clean, adjust gap, or replace. 5. Clean fuel line. 6. Prime engine. 7. Move throttle lever to FAST position.
Engine runs erratic	<ol style="list-style-type: none"> 1. Unit running with CHOKE applied, if so equipped. 2. Spark plug wire loose. 3. Blocked fuel line or stale fuel. 4. Water or dirt in fuel system. 5. Dirty air cleaner. 6. Carburetor not adjusted properly. 	<ol style="list-style-type: none"> 1. Move choke lever to OFF position. 2. Connect and tighten spark plug wire. 3. Clean fuel line; fill tank with clean, fresh (less than 30 days old) gasoline. 4. Drain fuel tank. Refill with fresh fuel. 5. Clean or replace air cleaner. 6. See authorized service dealer.
Engine Overheats	<ol style="list-style-type: none"> 1. Engine oil level low. 2. Dirty air cleaner. 3. Carburetor not adjusted properly. 	<ol style="list-style-type: none"> 1. Fill crankcase with proper oil. 2. Clean or replace air cleaner. 3. See authorized service dealer.
Problem Cylinder rod will not move	Cause <ol style="list-style-type: none"> 1. Broken drive shaft. 2. Shipping plugs left in hydraulic hoses. 3. Set screws in coupling not adjusted properly. 4. Loose shaft coupling. 5. Gear sections damaged. 6. Damaged relief valve. 7. Hydraulic lines blocked. 8. Incorrect oil level. 9. Damaged directional valve. 10. Blocked directional valve. 	Remedy <ol style="list-style-type: none"> 1. See authorized service dealer. 2. Disconnect hydraulic hoses, remove shipping plugs, reconnect hoses. 3. See operator's manual for correct adjustment. 4. Correct engine/pump alignment as necessary. 5. See authorized service dealer. 6. See authorized service dealer. 7. Flush and clean hydraulic system. 8. Check oil level. 9. See authorized service dealer. 10. Flush and clean hydraulic system.

SPECIFICATIONS

Max. Ram Force.....	40TON.
Cycle Time	18 Seconds
Hydraulic Tank Capacity	4.3Gallon (16 L).
Max. Log Length.....	21.6inch (55cm)
Coupler Ball Size	2" Coupler
Tire Size.....	16 inches
Max. Towing Speed.....	45MPH
Engine.....	13hp, OHV, 4stroke,3600rpm
Cylinder Size	5" x 19.4" (127mmx493mm)
Hydraulic Fluid Type	10W AW32, ASLE H-150, ISO 32
Gear Pump	2-Stage,16GPM(57.6L/min)
Max. Pressure	3600psi (25Mpa)
Control Valve.....	Detent (auto-return)
Overall Dimensions	
Height.....	36.2 inches(92cm)
Width.....	42.5 inches(108cm)
Length.....	84 inches (214cm)

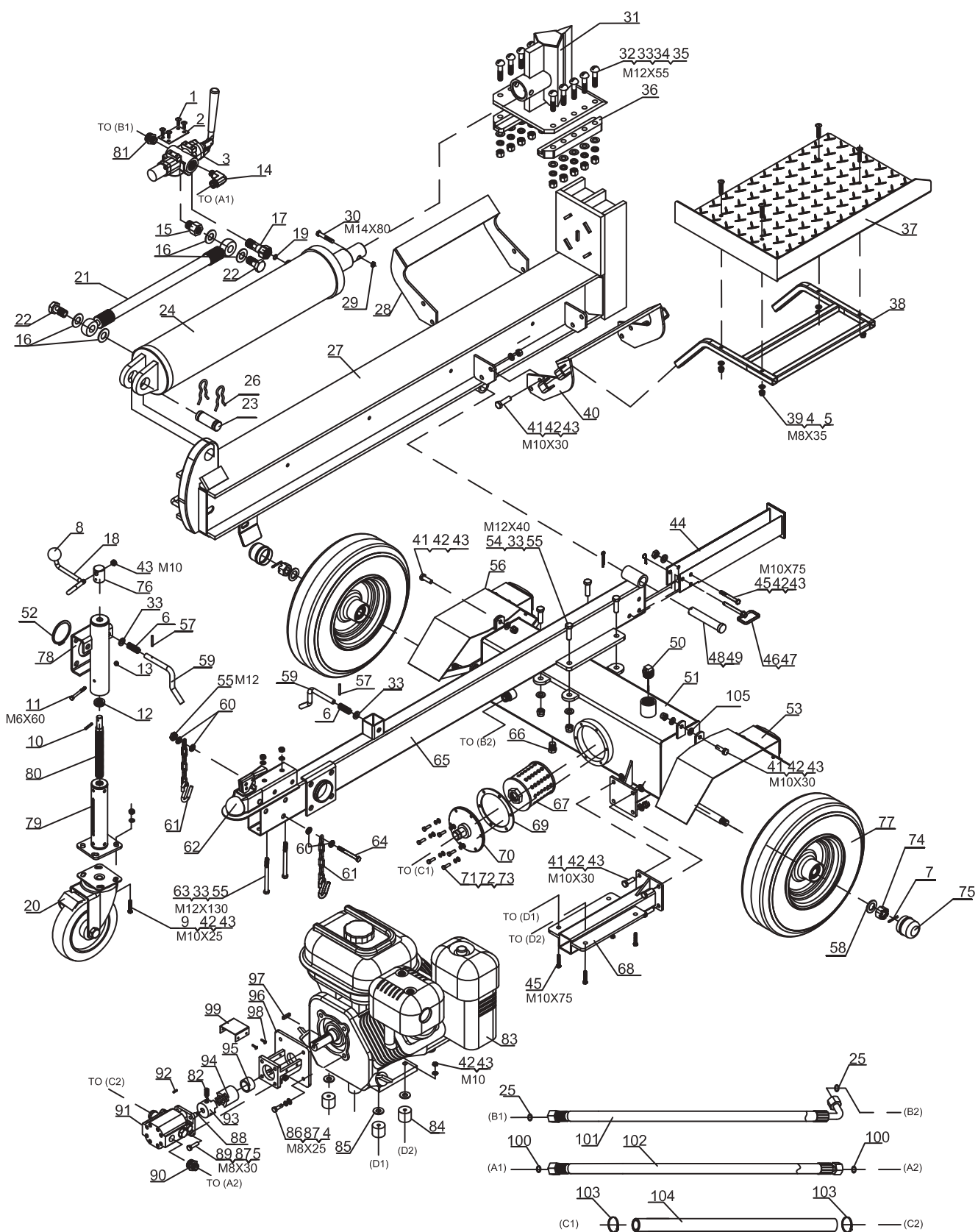
Hydraulic Oil

Oil Capacity is 3.4 gallons(12.8L). Use types 10W AW32, ASLE H-150, and ISO32

The manufacturer reserves the right to make improvements in design and/or changes in specifications at any time without incurring any obligation to install them on units previously sold.

7

SPECIFICATIONS



8

Parts List

No.	Drawing No.	PARTS NAME	QTY
1	9110-08010-DX	Screw M8x10	4
2	LSA22-00025	Valve Plate	1
3	LSM30-05000	Control Valve	1
4	9301-08000-DX	Flat Washer Ø8	8
5	9206-08000-DX	Hex Lock Nut M8	8
6	LSP25-00003-DX	Spring	2
7	9404-04036-DX	Cotter Pin Ø4x36	2
8	LSE20-07001	Handle Ball	1
9	9101-10025-DX	Hex Bolt M10x25	4
10	9402-05030-DX	Pin Ø5x30	1
11	9101-06060-DX	Hex Bolt M6x60	1
12	9608-51102	Push Bearing	1
13	9206-06000-DX	Nylon Lock Nut M6	1
14	LST37-00012	90° Angle Connector	1
15	LST37-00003	Valve Joiner A	1
16	9905-20000	Combination Washer Ø20	4
17	LSP25-17000	Combination Joiner	1
18	LST37-00013	Jockey Wheel Handle	1
19	9901-15*2.5	O ring Ø15x2.5	1
20	LST37-14000	8" Caster	1
21	LST37-00007	Hydraulic Hose (Valve-Cylinder)	1
22	LST37-00002	Bolt Connector M20	2
23	LSP30-00004-DX	Cylinder Mounting Pin	1
24	LST37-00007	Cylinder	1
25	9901-17*2.5	O Ring Ø17x2.5	2
26	LSP25-00005-DX	R Pin Ø5	2
27	LST37-01000	Beam Weldment	1
28	LST37-03000	Right Log Cradle	1
29	9206-14000-DX	Hex Lock Nut M14	1
30	9101-14080-DX8.8	Hex Bolt M14x80	1
31	LST37-05000	Wedge	1
32	9117-12055-DX12.9	Screw M12x55	10
33	9301-12000-DX	Flat Washer Ø12	18
34	9306-12000-DX	Lock Washer Ø12	10
35	9210-12000-DX	Thick Hex Nut M12	10
36	LSA22-03001	Keeper Plate	2
37	LST37-00001	Wood Tray	1
38	LST37-11000	Wood Tray Frame	1
39	9101-08035-DX	Hex Bolt M8x35	4
40	LST37-02000	Left Log Cradle	1

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Parts List

No.	Drawing No.	PARTS NAME	QTY
41	9101-10030-DX8.8	Hex Bolt M10x30	18
42	9301-10000-DX	Flat Washer Ø10	27
43	9206-10000-DX	Hex Lock Nut M10	28
44	LSA22-15000	Rear Support Leg	1
45	9101-10075-DX8.8	Hex Bolt M10x75	5
46	LSP22-16000	Hitch Pin	1
47	LSP25-00012	R Pin	1
48	LSA22-00015-DX	Hinge Pin	1
49	9404-04040-DX	Cotter Pin Ø4x40	1
50	LSP25-13000	Oil Bolt	1
51	LST37-10000	Oil Tank	1
52	9304-62000-FH	Circlip for Shafr Ø62	1
53	LSA22-18000	Right Protection Fender	1
54	9101-12040-DX8.8	Hex Bolt M12x40	4
55	9206-12000-DX	Hex Lock Nut M12	7
56	LSA22-17000	Left Protection Fender	1
57	9404-03030-DX	Cotter Pin Ø3x30	2
58	9301-20000-DX	Flat Washer Ø20	2
59	LSP25-00008-DX	Safety Pin	2
60	9399-12000-DX	Thick Flat Washer Ø12	4
61	LSA22-13000	Safety Chain with Hook	2
62	Z103	2" Coupler	1
63	9101-12130-DX8.8	Hex Bolt M12x130	2
64	9101-12090-DX8.8	Hex Bolt M12x90	1
65	LST37-06000	Tow Bar	1
66	LSP25-00010-DX	Oil Plug	1
67	LSP30-00007	Oil Filter	1
68	LST37-04000	Engine Mounting Plate	1
69	LSP30-00006	Rubber Washer	1
70	LSP30-15000-DX	Oil Filter Mounting Plate	1
71	9101-06020-DX8.8	Hex Bolt M6x20	6
72	9306-06000-DX	Lock Washer Ø6	6
73	9301-06000-DX	Flat Washer Ø6	6
74	LSP25-00020-FH	Slotted Nut M20	2
75	LSP25-00009-DX	Axle Cap	2
76	NS10-02002-DX	Jockey Wheel Handle Bushing	1
77	LSP25-14000	Wheel / Tire Assembly	2
78	LST37-08000	Outside Wheel Bushing	1
79	LST37-09000	Moving Pipe	1
80	NS10-02001	Screw rod	1

8

Parts List

No.	Drawing No.	PARTS NAME	QTY
81	LST37-00016	Oil Return Pipe Connector	1
82	9121-06010-FH	Screw M6x10	1
83	LSP35-02001	Gasoline Engine 13HP	1
84	LSP35-00001	Polyurethane Block	4
85	9302-10000-DX	Big Flat Washer Ø10	4
86	9101-08025-DX8.8	Hex Bolt M8x25	4
87	9306-08000-DX	Lock Washer Ø8	8
88	LSP25-10008-FH	Steel Wire Snap Ring for Shaft	1
89	9101-08030-DX8.8	Hex Bolt M8x30	4
90	LST37-00014	Outlet Connector of Pump	1
91	LSP35-02006	Gear Pump (16GPM)	1
92	8801-3X3X25	Flat Key	1
93	LSP35-02003	Gear Pump Connector	1
94	LSP35-02002	Engine Connector	1
95	LSP35-02004-DX	Engine Bushing	1
96	LSP35-02005	Gear Pump Stand	1
97	8801-7X7X40	Flat Key	1
98	9101-05010-DX8.8Q	Hex Bolt M5x10	4
99	LSP25-10006	Connector Cover	1
100	9901-14*2.5	O Ring 14x2.5	2
101	LST37-00006	Hydraulic Hose (Valve-Oil Tank)	1
102	LST37-00008	Hydraulic Hose (Valve-Pump)	1
103	LSP25-00011-DG	Hose Clamp	2
104	LST37-00011	Oil Pipe	1
105	LSA22-00021	Rubber Washer 2	6